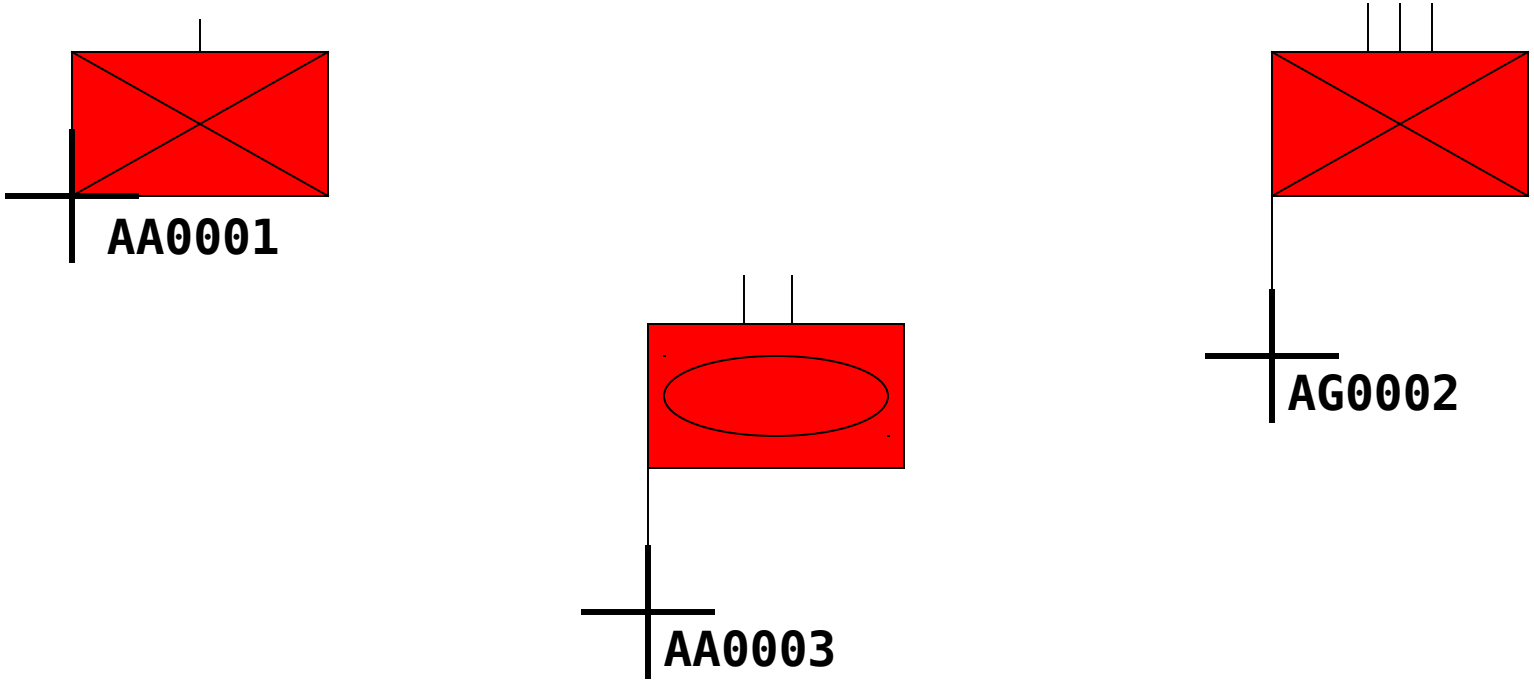
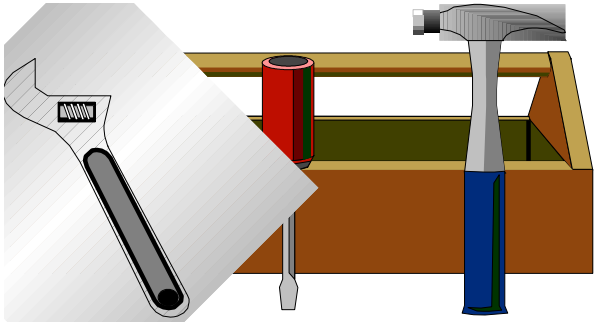
AFATDS TARGET MANAGEMENT



OBJECTIVES

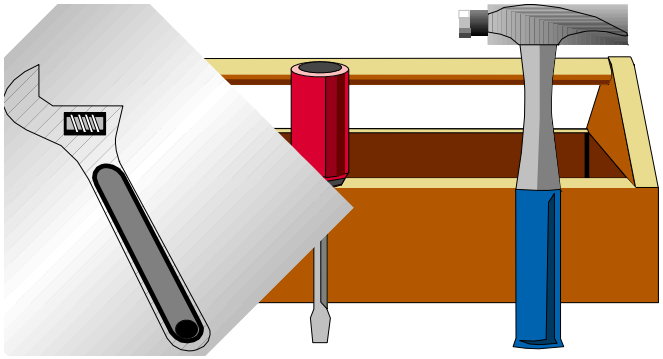
- **Create a Target Overlay**
- **Enter Target Number Block**
- **Discuss Target Processing**
- **Examine the default Target Lists**
- **Edit a Target List**
- **Make a new target list**
- **Search Capability**
- **Send Query Capability**
- **Add a Target from an Enemy symbol**
- **Enter a Shell Report**
- **Combine Duplicate Targets**

CREATE A TGT OVERLAY



- Click **Map> Overlays> In Use**
  - The OVERLAYS SETTINGS window is displayed.
- Click **<NEW>**
- The overlay window is displayed.

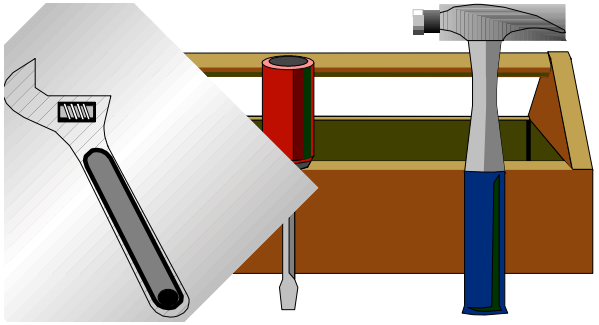
CREATE A TGT OVERLAY



- NAME: **TARGETS**

- Click **Targets (Default)**
  - Target Categories: **All**
  - Status: **All**
  - **Target Indicators**

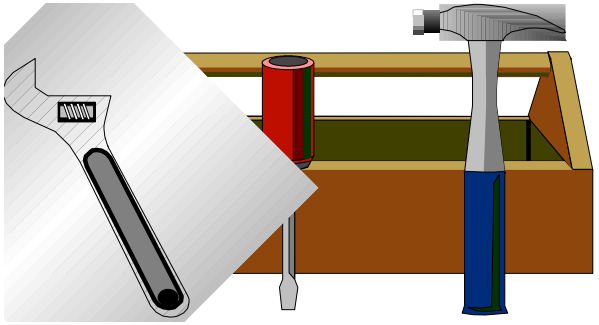
CREATE A TGT OVERLAY



- Choose the situation the overlay will depict:
  - PLANNED SITUATION
  - CURRENT SITUATION
  - **SITUATION IN VIEW**
- Check **Situation In View**

  <OK>

CREATE A TGT OVERLAY



- Select **<APPLY>** from the displayed OVERLAY SETTINGS window.

- Select **<APPLY TO MAP SETUP>**

  <OK>

TARGET NUMBERING

- An Alpha-numeric system of identifying and tracking targets and their originating unit.
- Click **Mission Processing> Preferences**
- Select **[Target Number / Msn Routing]** Tab

ASSIGN

At A FDC

AA0000 to 0499

At B FDC

BB0000 to 0499

Select **<Show Target Allocation Par**

ALLOCATED TARGET NUMBERS

- FSCC 2nd Marines: AF0000 to 1000
- FO 21 Co A: AF1001 to 2000
- FO 24 Co E: AF3001 to 4000
- FDC 1/10: AG0000 to 1000

TARGET PROCESSING

TARGET MESSAGES

- **TARGET**
  - A report of targetable information that passes target selection standards.

AA1000

  - Page 265 of the Operator's Notebook

TARGET MESSAGES

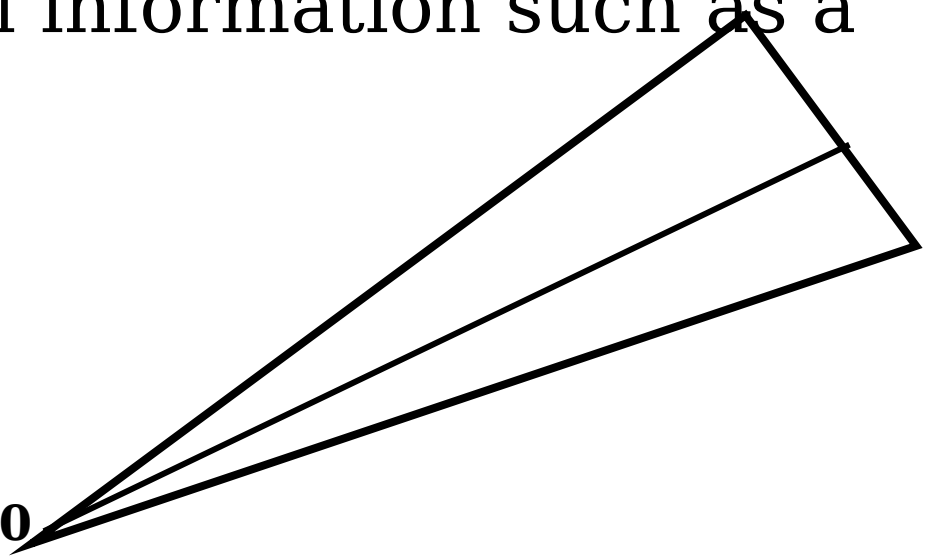
- **SUSPECT TARGET**
  - A report that <u>fails</u> target selection standards.
    - ATI Report
    - Fire Request
    - Generated by Target Indicator Intersections

AA1000

  - Page 285 of the Operator's Notebook

TARGET MESSAGES

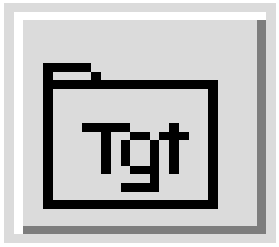
- **TARGET INDICATOR**
  - Is directional information such as a shell report.



  - Page 281 of the Operator's Notebook

TARGET LISTS

- **Click 1 on the TARGET Workspace Icon (3rd Icon from the right)**
- **Double Click on CURRENT to display the permanent lists.**



TARGET LISTS

- **Permanent Lists:**
  1. Active
  2. Inactive
  3. Planned
  4. On-Call
  5. Suspect
  6. ATF

- **Operator Created:**
  1. ASL
  2. New
- Accessed by using the 3rd and 4th Icons from the right.

ACTIVE TARGET LIST

Lists all targets that are currently being processed as active fire missions.

INACTIVE TARGET LIST

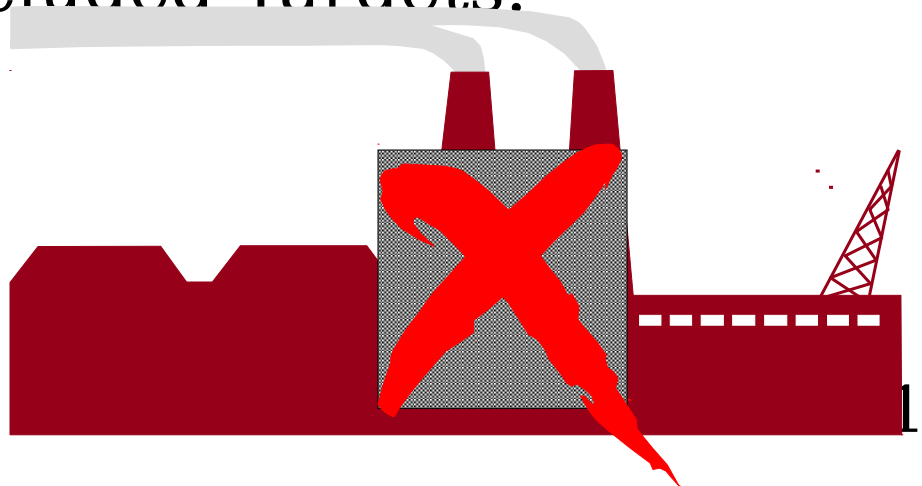
- Is a list of targets that have been engaged and the mission ended.

or

- ATI reports that pass TSS and are not High-Payoff Targets.

or

- Fire Requests which the target type is listed in the Excluded Targets.



PLANNED TARGET LIST

- The Planned list contains targets moved there by the operator or because of a precedence of PLANNED in target guidance.

- Those ATI Reports that fail transmission to the ATCSS server.

ON-CALL TARGET LIST

Contains:

- Targets entered from the keyboard or assigned to the on-call list by the operator.
- Any Missions that were Recorded as Targets.
- Targets implemented from a planned situation.
- Targets are assigned to “CURRENT” Groups, Series, Fire Plans or Schedules of Fires.

SUSPECT TARGET LIST

Contains:

- Target reports entered by the operator.
- Received fire requests that Fail TSS.
- Target Reports the Fail TSS.
- Intersecting Target Indicators that Fail TSS.

ATF TARGET LIST

This process allows fire support personnel to create, maintain and transmit a target list during the planning for and conduct of amphibious operations.

Operator Created

- AFATDS allows the creation of a dynamic number of “Named” Target Lists.

- Targets may be added from other target lists, or using the “New” functionality.

ASL (Air Support List)

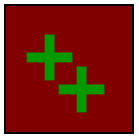
- AFATDS allows the creation of a dynamic number of Air Support Lists.
- These ASL are populated with Air Support Requests (ASR's).
- ASL's are used for ASR dissemination to the controlling agency for air assets.

TARGET INDICATOR LIST

- The Target Indicator List is not a Target List. However, it houses target report information that may become a target.
- The Target Indicator list contains shell reports that have not been correlated to indicate a target.
- Shell Reports will be discussed later in this class.

NEW TARGET LIST

These are operator created lists that allow the consolidation and dissemination of targets for specific missions. For example: If a mechanized program is desired, a new target list named “Mechanized Targets” is built, and all mechanized type targets are added to this list. This will allow the operator to better manage his target information when conducting fire planning operations.



- Click 1 on the Create New Target List Icon (4th from the right).
- List: **MECHANIZED TARGETS**
- Click 1 on the **Save Icon** (4th from the left)

ADDING TARGETS

- Click 1 the Create New Mission Icon (1st from the left)
- The BASIC TARGET INFO window is displayed.
- There are 7 tabs along the top of the window;
  1. Basic Tgt Data
  2. Munitions
  3. More Tgt Data
  4. More Mission Data
  5. Attack Summary
  6. Shift
  7. Laser/Polar

BASIC TARGET DATA

- ID information includes
  - Target Number
  - Originator
  - Observer
- Warning Order includes
  - Mission type
  - Method of Fire
  - Method of Control
  - Fire Support System
  - Fire Unit Size
  - Time On Target

BASIC TARGET DATA (cont)

- Target Description
  - Location
  - Category
  - Type
  - Shape
    - Point - single grid
    - Circular - grid and radius
    - Rectangular - grid with length, width, and attitude
    - Linear - grid with length and attitude

MUNITIONS

- Adjust - Shell, Fuze, and Lot
- FFE1 - Shell, Fuze, Lot, and Volleys
- FFE2 - Shell, Fuze, Lot, and Volleys
- Propellant - Model, Lot, and Charge
- Sheaf
  - Parallel
  - Open
  - Converge
  - Special (allows entry of DISTANCE BETWEEN BURSTS)
  - BCS (100m radius, this is the default)
- Trajectory - High or Low
- Quick Smoke – Duration, Wind Speed & Direction, Conditions

MORE TGT DATA

- Countermeasures
- Elements
- Environment
- ATF
- Target Activity/Moving TGT
- More

MORE MISSION DATA

- Precedence
- Value
- Height of Burst
- Fire Units
- Adjusting Units

ATTACK SUMMARY

- Displays the Source and Attacking Unit when the Target is active.

SHIFT

- Used for Shift from a Known Point or Target Mission.

- Input the Target information with Direction, Lateral, Range, and Vertical shift.

- Select **<Apply>** and the information will be converted to a grid.

POLAR/LASER

- Used when a Target is located by either Polar or Laser method.
- The observer must be entered in the Basic target data.
- Input the Target information with Direction, Distance, and Vertical shift.
- Select **<Apply>** and the information will be converted to a grid.

ENTER TARGETS

- Add to the Mechanized List.

- Observer: **FO 21 Co A**
- Location: **649 170/900**
- Category: **Maneuver**
- Tgt Type: **Armored Vehicle**
- TLE: **500**

- Add to the Mechanized List.

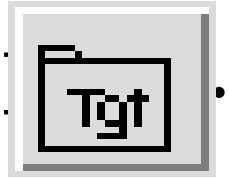
- Observer: **FO 24 Co E**
- Location: **648 171/900**
- Category: **Maneuver**
- Tgt Type: **Armored Vehicle**
- TLE: 1**00**

ENTER TARGETS (Cont.)

Add to the Mechanized List

- Observer: **CBR 01**
- Location: **6485 1705/880**
- Category: **Maneuver**
- Tgt Type: **Armored Vehicle**
- TLE: **200**

- Close the Target Workspace Window.

- Re-open the Target works 

.
- Double click 1 on **CURRENT**.
- Highlight **MECHANIZED Targets** and Click 3 to open the list.
- Highlight Target **AA/BB0000** to sensitize all icons.

- From left to right there are 17 Icons.
  - Create New Missio
  - Edit Mission
  - Refresh Mission Table
  - Save List
  - Send List
  - Print Current List
  - Find a List
  - Find Target on Map

- View Mission
- Delete Selected Missions
- Delete all Missions
- Copy Mission
- Initiate Fire Mission
- Create New Target List
- Create New Air Support List
- Exit
- Help

<Exit> the Window.

Add an Enemy Unit to a Target List

- Select the **UNK_ARMOR_BN** (northern most).
- Click 3 and release on **ADD TO TARGET LIST**.
- The Enemy Unit is added to the On-Call Target List.

EDITING A TARGET LIST IN THE CURRENT PLAN

- AFATDS allows the editing of ANY target list in the Current Plan (With the exception of the ATF Target List).

- Open the Target workspace and display the Mechanized target list.

Tailor a Target List

•AFATDS allows the operator to set up a Target List in an order that will make it easier to view specified data.

•Click 1 on **List> Select Columns...** The “Hide/Show Columns” window is displayed. The operator may move data fields and place them in the desired order.

•Move all of the fields in the Displayed List to the Non-Displayed List using the double arrow. >>

•In order, move the following fields to the Displayed list Using the single arrow. <

1. Target No
2. TLE
3. Mission Status
4. Target Type
5. Prec
6. Val
7. Target Location
8. Op Until

SEARCH CAPABILITY

•With the Target Workspace Open select **Options> Search...**

•AFATDS provides the operator the capability to search an individual target list or search all target lists. AFATDS will allow the operator to search target list(s) for targets meeting any combination of the following parameters.

- A Specific or All Target List(s). (Including Target List(s) in the Planned Situation)
- One or more Target Categories
- One or more Target Types
- DTG Target Acquired or Last Updated
- High Payoff Target (HPT)
- Mission Status
-Within Geometry or an operator defined area

•Enter the parameters for **ARMORED VEHICLE** and **TANK MEDIUM** in all Target Lists.

SEND QUERY CAPABILITY

•This function is similar to the Search function. Where as Search allows the operator to search *only those lists maintained at his AFATDS*, the operator may query another AFATDS for target information based on the same parameters used in a Search.

• Using the same Parameters, **<SEND QUERY>**
Highlight the adjacent FDC **<OK**.>

•A Medium Level alert is generated.

•The Target Search window is displayed showing all Targets that match your criteria.

Add Query Targets

- In the Search results window highlight all desired targets.
- Select **Target> Add To Target List**
- The Select Target List for ADD is displayed
- Highlight **MECHANIZED TARGETS**

  <OK>

SHELL REPORTS

- To input a Shell report select:

  Targets> Target Indicator List> Indicator> New
- Direction: **6100**
- Target Type: **ADA, HVY**
- Location: **692 098 / 980**
- Directional Error: **50 mils**
- Reporting Sensor: **FO 21 CO A 2nd MARINES**
- Reporting Sensor Kind: **FORWARD OBSERVER WITH LASER**

SHELL REPORT (cont)

- Weapon/Signal Type: **Artillery**
- Location source: **Shell Report**
- Reliability: **Completely**
- Caliber: **122**
- Rounds: **18**
- Duration: **3 minutes**

<OK>

COMBINING TARGETS

- Open the TARGET Workspace, and Display the Mechanized Target List.
- Highlight MECHANIZED TARGETS
- Select **Options> Check for Duplication**

COMBINING TARGETS (cont)

- The Duplicate Target window displays showing any duplicate targets
- Can Combine Targets or Continue without Combining

<COMBINE> and **<CONTINUE>**

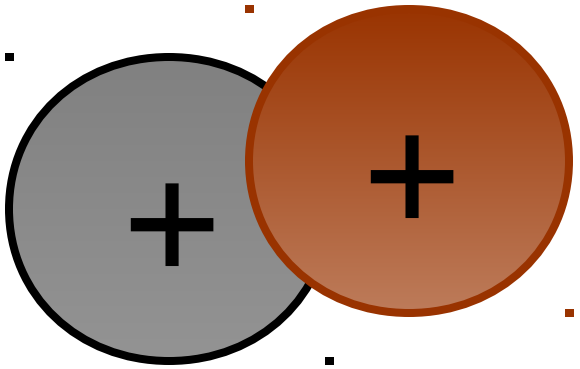
- Target List window is displayed.

<Exit>

- From the Target Workspace Highlight the list to be sent MECHANIZED TARGETS.

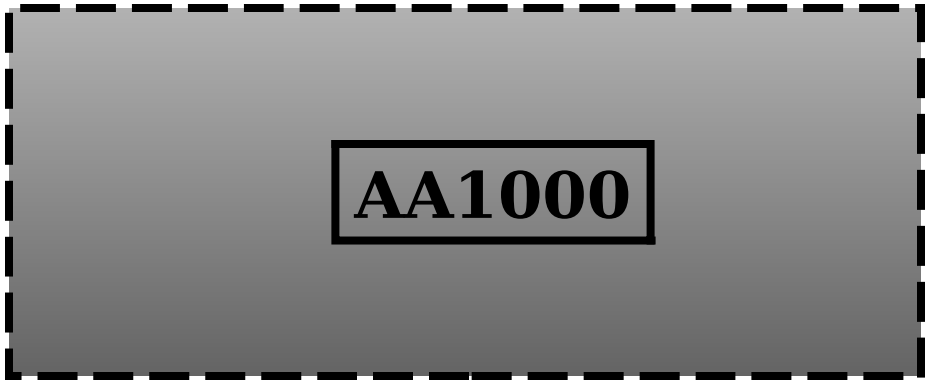
- Click 1 on the SEND Icon
  select the adjacent FDC and **<OK>**
  or
- Click 3 and select send.

SUSPECT TARGET PROCESSING



-Page 283 of the Operator's Notebook

SUSPECT TARGET LIST



SUSPECT TARGET LIST NAVIGATION

- Select **Mission Processing> Preferences>**

  Suspect Target Processing

- Click 1 on **TARGET Workspace Icon**

  Double click **<Current>**

  Highlight **CURRENT SUSPECT Target List.**

- Click 3 and select **<OPEN>**
- nimum Overlap (%): **30**

  Save and **<Exit>**

SUSPECT TARGET #1

- OBSERVER: **FO 21 CO A 1st BN 2nd MARINES**
- ATTITUDE: **1600**
- TYPE: **ADA, MDM**.
- LOCATION: **642 169 / 900**
- LENGTH: **300**
- WIDTH: **200**
- TLE: **100**
- STRENGTH: **5**

SUSPECT TARGET #2

- TYPE: **ADA, POSITION AREA**
- LOCATION: **6425 1695 / 910**
- TLE: **100**
- SHAPE: **POINT**
- OBSERVER: **FO 24 CO E 2nd BN 2nd MARINES**
- ACQUSITION AGENCY: **COMMUNICATIONS INTELLIGENCE**
- LOCATION SOURCE: **CONSTITUENT AZIMUTH REPORT**

- Click 1 on the SAVE Icon
- Results:
  - Suspect Targets are combined with a new target number.
  - Fire mission is generated with the new target number at grid 64225 16925 alt 905.
  - Suspect Target List is cleared and new target is stored in the Active Target List.
  - Click 1 on the IP Icon and deny the mission.

TARGET INDICATORS

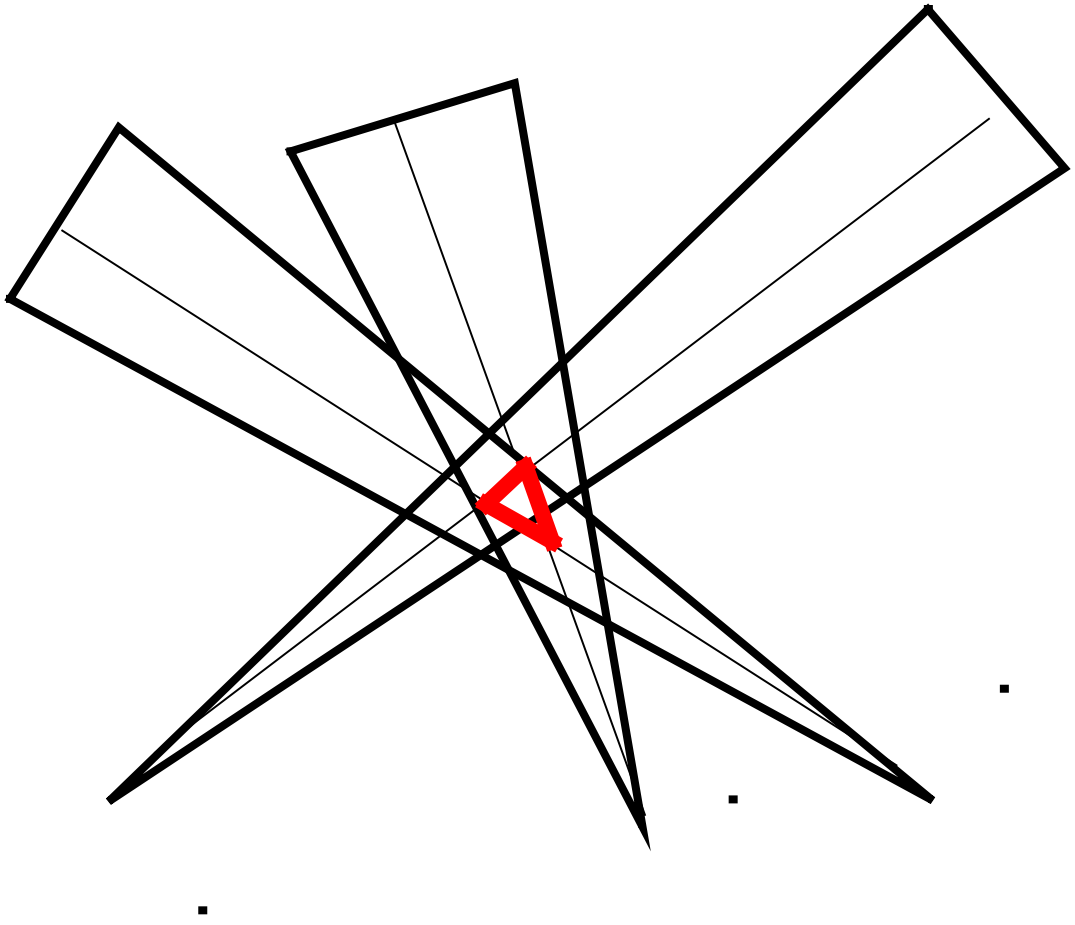
Select **Mission Processing> Preferences>**

Target Indicator Processing

ATI SHELL REPORT

-Page 274 of the Operator's Notebook

TARGET INDICATOR PROCESSING



Tgt Indicator Colors

- **ARTY HVY - RED**
- **ARTY TOWED - GREEN**
- **ARTY MED - GREEN**
- **ARTY LIGHT - BLUE**
- **ARTY UNK - BLACK**
- **MORTAR - YELLOW**
- **RKT/MSL - ORANGE**
- **ALL OTHERS - BLACK**

TARGET GENERATION PROCESSING

- **TARGETS INDICATOR FUNCTION OFF**
  - Assign tgt number, Determines decay DTG, Creates or updates Tgt Indicator list
- **TARGET INDICATOR FUNCTION ON**
  - Compares Tgt Indicator to each TGT except Active
  - Compares new indicator to Tgt Indicator list
  - Combines correlated Tgt Indicators
- **SUSPECT TGT PROCESSING OFF**
  - New Suspected tgt are stored but not processed
- **SUSPECT TGT PROCESSING On**
  - New Suspected compared to suspect Tgt List
  - Compared to each TGT except Active

SHELL REPORTS

- Select **TARGETS> TARGET INDICTOR LIST> INDICATOR> NEW**
- Direction: **6100**
- Target Type: **Arty, MDM**
- Location: **692 098 / 980**
- Directional Error: **50 mils**
- Reporting Sensor: **FO 21 CO A 2nd MARINES**
- Reporting Sensor Kind: **FORWARD OBSERVER WITH LASER**

SHELL REPORT (cont)

- Weapon/Signal Type: **Artillery**
- Location source: **Shell Report**
- Reliability: **Completely**
- Caliber: **122**
- Rounds: **18**
- Duration: **3 minutes**

<OK> and **<REFRESH>**

SHELL REPORT 2

- Select **INDICATOR> NEW**
- DIR: **6300**
- Target Type: **MISSLE, LT**
- Sensor/Impact Location: **692 098 / 980**
- Directional Error: **50 mils**
- Reporting Sensor: **FO 21 CO A 2nd MARINES**
- Reporting Sensor Kind: **Sound Ranging**

SHELL REPORT 2 (cont'd)

- Weapon Signal Type: **ROCKETS**
- Location Source: **SINGLE AZIMUTH REPORT**
- Reliability: **FAIRLY**
- Caliber: **107**
- Number of rounds: **1**
- Duration: **1**

<OK> and **<REFRESH>**

SHELL REPORT 3

- Select **INDICATOR> NEW**
- Target Type: **ARTY, Unknown**
- Sensor/Impact Location: **733 152 / 1220**
- DIR: **5100**
- Directional Error: **30 mils**
- Reporting Sensor:
  FO 24 CO E 2nd Bn 2nd MARINES
- Reporting Sensor Kind:
  FORWARD OBSERVER WITHOUT LASER

SHELL REPORT 3 (cont'd)

- Weapon Signal Type: **ARTILLERY**
- Location Source: **SHELL REPORT**
- Number of Rounds: **6**
- Duration: **1**

<OK> and **<REFRESH>**

SHELL REPORT 4

- **INDICATOR> NEW**
- DIR: **4700**
- Target Type: **ARTY, MED. SP (121-160mm)**
- Select Sensor/Impact Location: **759 181 / 1000**

- Directional Error: **25 mils**
- Reporting Sensor: **CBR 01 10TH MARINES**
- Reporting Sensor Kind: **Counter Mortar Radar**

SHELL REPORT 4 (cont'd)

- Weapon / Signal Type: **ARTILLERY**
- Location Source: **SINGLE AZIMUTH REPORT**
- Reliability: **COMPLETELY**
- Caliber: **122**
- Number of Rounds: **18**
- Duration: **3**

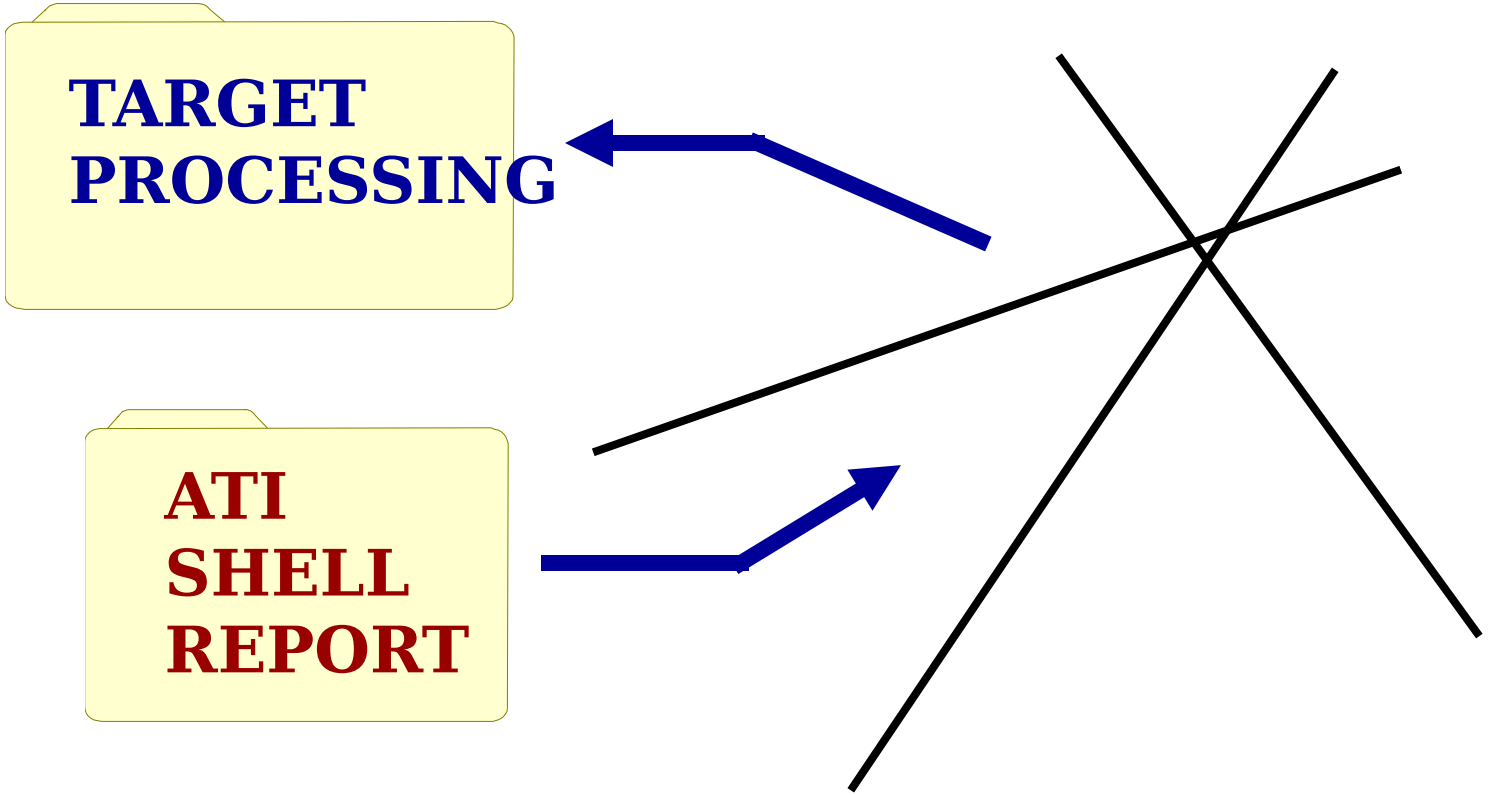
<OK> and **<REFRESH>**

- Three matching Indicators were combined and deleted from the Target Indicator List.
- New target is generated with a new number and stored in the Suspect Target List.
- Target grid is **66872 17118** alt **1066** and is circular with **113m** radius.
  - Altitude is an average and must be verified on a map prior to firing.

TARGET GENERATION

- **TARGETS TYPE**
  - Based on smallest TLE, If the same based on newest report
- **TARGET LOCATION**
  - Based on TLE overlap and area of intersection
- **TIME LAST UPDATED**
  - Time the computer combined the Targets
- **OBSERVER/ORIGINATOR**
  - OPFAC that combined the Target indicators
- **TARGET SHAPE**
  - Is assigned circular with the largest size of the combined reports
- **TARGET STRENGTH and DOP**
  - Based on the worst case of the reports

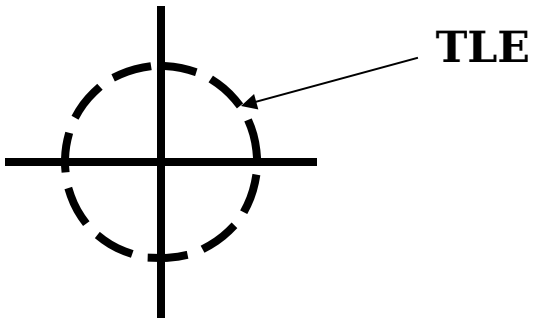
MATCHED TARGET INDICATORS



-Page 283 of the Operator's Notebook

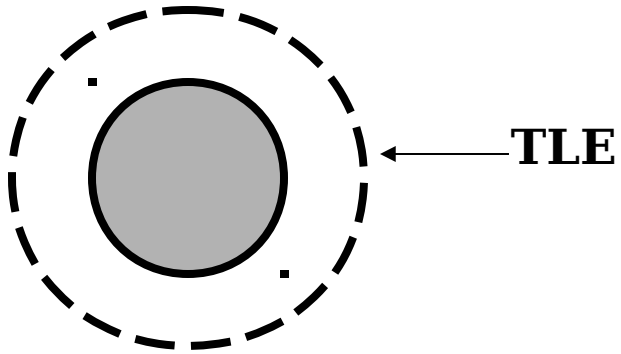
POINT TARGET

- **Defined by a Grid Location.**
- **TLE surrounds the Point by the prescribed distance.**



CIRCULAR TARGET

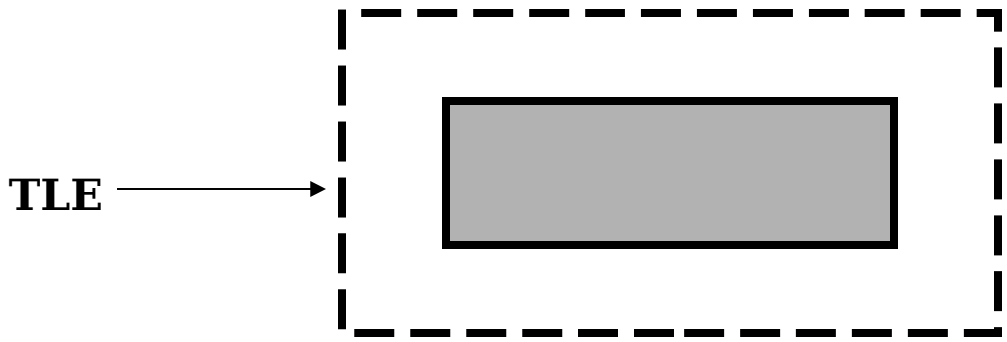
- **Defined by a Grid Location and a Radius.**
- **TLE surrounds the circle by the prescribed distance.**



RECTANGULAR TARGET

- **Defined by a Grid Location with a length, width and attitude.**

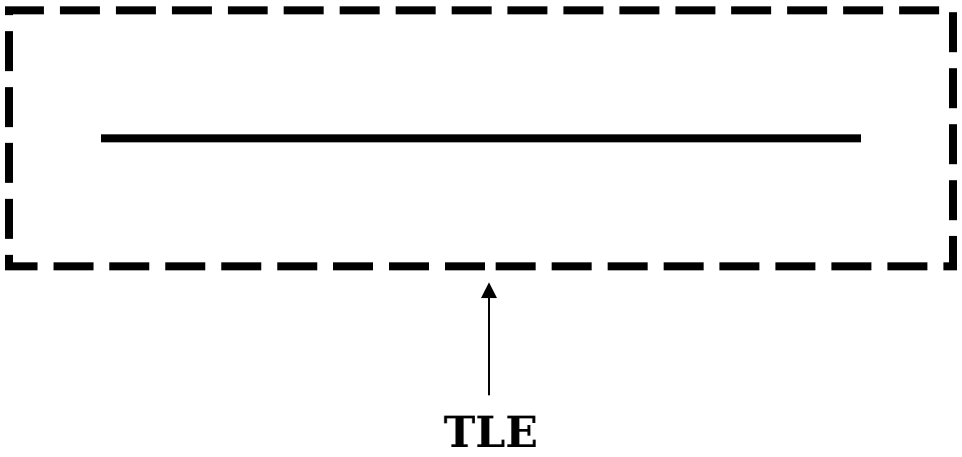
- **TLE surrounds the Rectangle by the prescribed distance.**



LINEAR TARGET

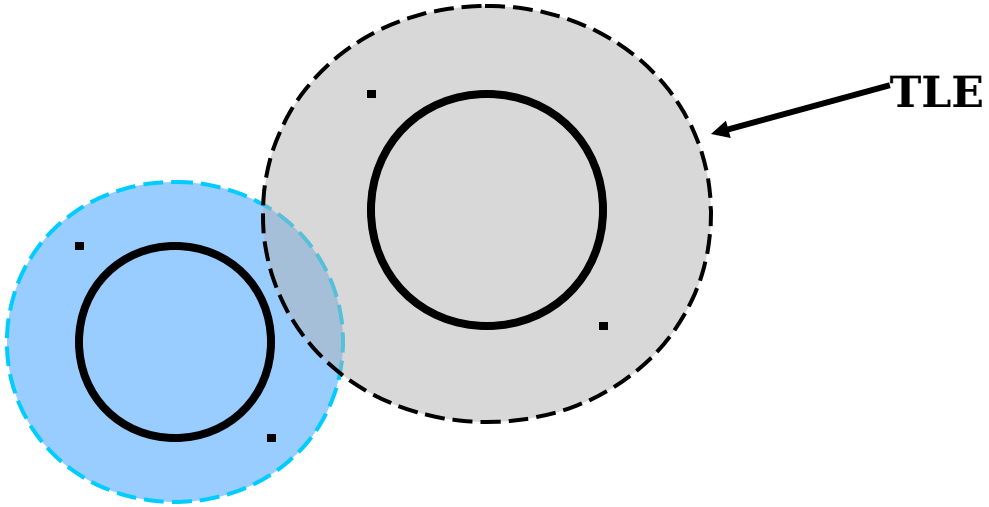
- **Defined by a Grid Location with a length and attitude.**

- **TLE surrounds the Line by the prescribed distance.**



TARGET OVERLAP

- **Overlap of Target and TLE**

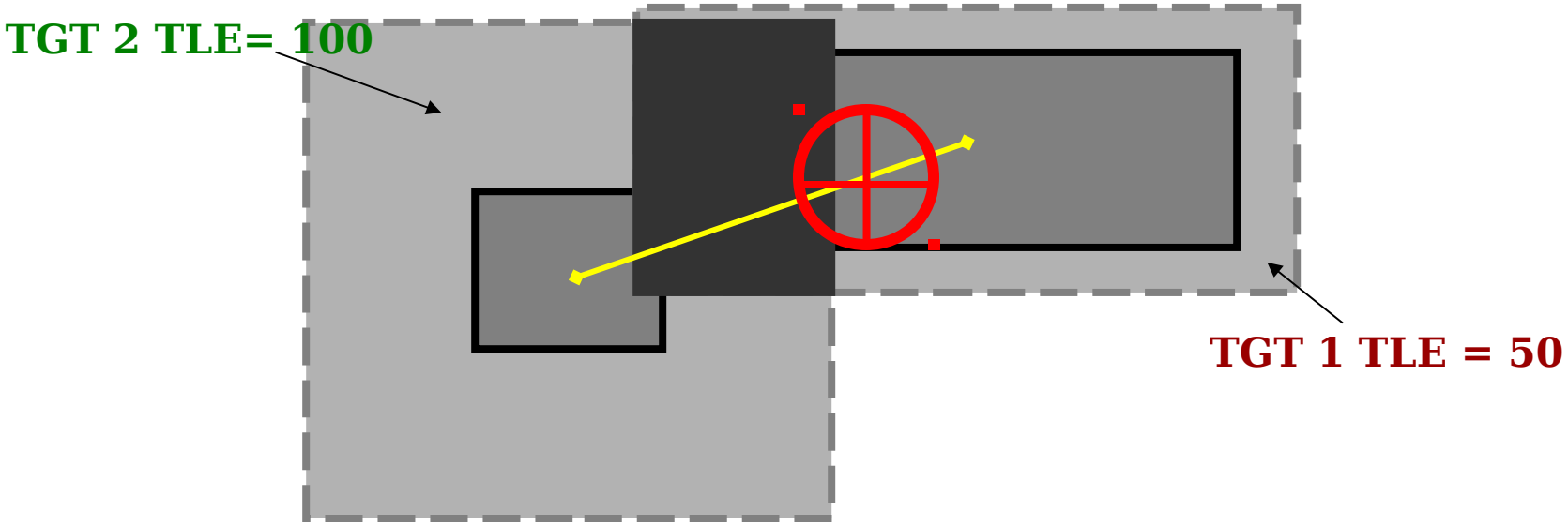


- **% of overlap = Overlap area / Tgt area**
  - **Computed for both tgts, larger is comp**
  value in <u>SUSPECT TARGET LIST</u> windo

- Page 287 of the Operator's Notebook

LOCATION COMPUTATION

- **TGT TLE / TOTAL TLE = % of distance between parent centers.**



Example: TGT 1 TLE / TOTAL TLE = ???
50 / 100+50 = 33%

New target center is 33% of the distance from TGT 1

?? QUESTIONS ??

SUMMARY

- **Created a Target Overlay**
- **Entered Target Number Block**
- **Discussed Target Processing**
- **Examined the Target Lists**
- **Edited a Target List**
- **Built a new target list**
- **Search Capability**
- **Send Query Capability**
- **Added a Target from an enemy symbol**
- **Entered a Shell Report**
- **Combined Duplicate Targets**